LIKHT, Lazar' Moiseyevich

[Diseases of the organs of digestion] Bolezni organov
pishchevareniia. Rostov-na-Donu, Rostovskoe knizhnoe izd-vo,
1958. 368 p.   (MIRA 12:6)
    (DIET IN DISEASE)   (DIGESTIVE ORGANS--DISEASES)

$h i K h T, L.o.$ PHASE I BOOK EXPLOITATION   188

Eksperimental'nyy nauchno-issledovatel'skiy institut
  metallorezhushchikh stankov

Modernizatsiya tokarno-revol'vernykh stankov; rukovodyashchiye
  materialy (Modernization of Turret Lathes; Instructions)
  Moscow, Mashgiz, 1957. 170 p. 8,500 copies printed.

AUTHORS: Likht, L.O., Kudinov, V.A., Lapidus, A.C., Azarevich,
  G.M., Skidal'skiy, M.M., Vedernikov, A.I.; Ed.: Prokopovich,
  A.Ye.; Ed. of Publishing House: Balandin, A.F.; Tech. Ed.:
  El'kind, V.D. Managing Ed. for literature on metalworking
  and tool making [Mashgiz] Beyzel'man, R.D., Engineer.

PURPOSE: The book is intended for engineering and technical
  personnel in machine-building plants.

COVERAGE: The book presents an analysis of the existing stock
  of turret lathes and outlines basic trends in their modernization.
  The following data are included: examples for calculating the
  main drive and feeds; classification and description of devices
  for mechanization and automation; description of various devices

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Modernization of Turret Lathes; Instructions   188

Card 3/4

Modernization of Turret Lathes; Instructions   188

Card 3/4

AVAILABLE: Library of Congress

VK/ksv
7-18-58

Card 4/4

25(2)   PHASE I BOOK EXPLOITATION   SOV/1689

Gradusov, N.M., L.O. Likht, E.I. Kalinkina, and V.A. Kudinov

Modernizatsiya tokarnykh mnogoshpindel'nykh avtomatov i poluavtomatov;
   rukovodyashchiye materialy (Modernization of Automatic and Semi-
   automatic Multi-spindle Lathes; Instructions) Moscow, Mashgiz,
   1958. 118 p. 6,500 copies printed.

Sponsoring Agency: Moscow. Eksperimental'nyy nauchno-issledovatel'skiy
   institut metallorezhushchikh stankov.

Ed.: A. Ye. Prokopovich; Tech. Ed.: A. Ya. Tikhanov; Managing Ed. for
   Literature on Metalworking and Tool Making: R.D. Beyzel'man.

PURPOSE: This book is intended for production workers who work with
   machine tools, for plant designers and for processing engineers.

COVERAGE: The authors analyze the existing stock of multispindle
   automatic and semiautomatic lathes and determine the main outlines

Card 1/4

Modernization of Automatic (Cont.)   SOV/1689

   for their modernization. They describe various devices which
   broaden the operating potential of automatic lathes and discuss the
   problem of increasing their rigidity and vibration resistance.
   No personalities are mentioned. There are 28 references, of which
   26 are Soviet, 1 is German and 1 English.

TABLE OF CONTENTS:

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Modernization of Automatic (Cont.)   SOV/1689

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Modernization of Automatic (Cont.)

SOV/1689

AVAILABLE: Library of Congress (TJ1218.M6565)

GO/hcr
8 June 59

Card 4/4

AYZENSHTADT, L.A.; PEN'KOV, P.M.; GLADKOV, B.A.; LIKHT, L.O.;
    KRIMMER, T.Ye.; KASHEPAV, M.Ya., kand. tekhn. nauk;
    MERPERT, M.P., kand. tekhn. nauk; KOPERBAKH, B.L.;
    CHERNIKOV, S.S., kand. tekhn.nauk; BELOV, V.S.; ZHURIN,
    B.F.; MONAKHOV, G.A., kand.tekhn.nauk; MOROZOV, I.I.;
    MUSHTAYEV, A.F.; OGNEV, N.N.; PALEY, M.B., kand. tekhn.
    nauk; FURMAN, D.B.; LIVSHITS, A.L., kand.tekhn.nauk;MECHETNER,
    B.Kh.;SOSENKO,A.B;AVDULOV, A.N.; LEVIN, A.A., kand.tekhn.
    nauk; YAKOBSON, M.O., doktor tekhn.nauk; MAYOROVA, E.A.,
    kand.tekhn.nauk; MOROZOVA, Ye.M.; ZUSMAN, V.G., kand.tekhn.
    nauk; NAYDIS, V.A., kand.tekhn.nauk; VLADZIYEVSKIY, A.P., prof.,
    doktor tekhn. nauk, red.; BELOGUR-YASNOVSKAYA, R.I., red.;
    CHIGAREVA, E.I., red.; ASVAL'DOV, M.Ya., red.; KOGAN, F.L.,
    tekhn. red.

[Machine-tool industry in capitalist countries] Stanko-
stroenie v kapitalisticheskikh stranakh. Pod red. i s pre-
disl. A.P.Vladzievskogo. Moskva, 1962. 822 p. (MIRA 15:7)

1. Moscow. TSentral'nyy institut nauchno-tekhnicheskoy in-
formatsii mashinostroyeniya. 2. Eksperimental'nyy nauchno-
issledovatel'skiy institut metallorezhushchikh stankov
(for Vladziyevskiy, Belogur-Yasnovskaya, Chigareva, Asval'dov,
Kogan).
                (Machine-tool industry)

LIKHT, M.K.; KUZ'MINSKAYA, S.B.

Solidification of binary alloys in the temperature range.
Fiz. met. i metalloved. 11 no.6:878-882 Je '61.   (MIRA 14:6)

1. Giprostal', Khar'kov.
          (Alloys--Thermal properties)
              (Solidification)

S/137/61/000/012/022/149
A006/A101

AUTHORS: Zhitormirskiy, I. S., Likht, M. K., Dreyzin-Dudchenko, S. D.

TITLE: A method of calculating the temperature field and the crystallization
front in the zone of secondary cooling in square section ingots dur-
ing continuous teeming of steel

TEXT: A method is described to calculate the temperature fields and crys-
tallization front in secondary cooling zones of square-section ingots during con-
tinuous teeming of steel. It is noted that the accuracy of calculation by this
method is sufficient for practical purposes and that results of calculating the
temperature field can be applied to investigate the effect of cooling conditions
on mechanical stresses in the crust and on the quality of the ingot. By varying
the values of dimensionless criteria of similarity, a sufficiently complete table
of data can be obtained for the depth of the liquid phase for parameters of dif-
ferent values, and corresponding recommendations can be given as to the height of

Card 1/2

LIKHT, M.K. (Khar'kov)

Conditionality in the problem of the minimum quadratic functional.
Zhur. vych. mat i mat fiz. 3 no.6:979-987 N-D '63.   (MIRA 17:1)

LIKHT, M.K.

Remark on the Paley - Wiener theorem on integral functions
of finite power. Usp. mat.nauk 19 no. 1:169-171 Ja-F '64.
(MIRA 17:6)

USSR/Morphology of Man and Animals (Normal and Pathologic).   S-3
          Vascular System.

Abs Jour   : Ref Zhur - Biol., No 4, 1958, 17033

          From 5 to 17 veins entered the superior sagittal sinus
          or lacunae. Extreme forms of venous variations were
          revealed: looped anastomosing forms and straight forms
          without anastomoses. In some cases, blood from an entire
          hemisphere returned through a single vein 6 mm in diameter.
          Blood from the medial surfaces of the hemispheres returned
          along venous trunks into the superior and inferior sagit-
          tal sinuses.

Card 2/2

LIKHT, R.Z.

Priority of I. E. Shavlovskii in the problem of development of the
cerebral veins. Arkh. anat., Moskva 29 no.2:74-76 Mar-Apr 1952.

(CLML 23:2)

1. Candidate Medical Sciences. 2. Of the Department of Operative
Surgery and Topographic Anatomy (Head -- Honored Worker in Science Prof.
A. Yu. Sozon-Yaroshevich), Leningrad Sanitary-Hygienic Institute.

LIKHT, R.Z. (Leningrad, 28 , Liteynyy pr., d.34, kv.6)

Topographical anatomy of the veins of the meial region of the brain.
Arkh.anat. gist. i embr. 33 no.4:14-17 O-D '56.   (MLRA 10:3)

1. Iz kafedry operativnoy khirurgii i topograficheskoy anatomii
(zaveduyushchiy - zasluzhennyy deyatel' nauki professor A.Yu.
Sozon-Yaroshevich) Leningradskogo sanitarno-gigiyenicheskogo medi-
tsinskogo instituta.
          (BRAIN, blood supply
               anat. of medial veins)

MILASHKIN, A.G., kand. med. nauk; LIKHT, R.Z., kand. med. nauk

The 14th Scientific Session of the A.V. Vishnevskii Surgical
Institute of the Academy of Medical Sciences of the U.S.S.R.
Vest. Khir. 91 no.10:138-140 O '63.   (MIRA 17:7)

MEDVEDOVSKAYA, TS.P.: LIKHTAREV, I.A.

Some characteristics of inclusion and distribution of p^{32} in
the eye tissue of rabbits. Med. rad. 8 no.11:9-13 N '63.
(MIRA 17:12)

1. Iz Kiyevskogo instituta gigiyeny truda i professional'nykh
zabolevaniy (direktor - prof. L.I. Medved').

L 54640-65

ACCESSION NR: AP5010340

UR/0205/65/005/002/0213/0217

AUTHOR: Medvedovskaya, Ts. P.; Likhtarev, I. A.

TITLE: The accumulation of incorporated radioactive phosphorus in eye tissues and its elimination

SOURCE: Radiobiologiya, v. 5, no. 2, 1965, 213-217

TOPIC TAGS: animal, rabbit, phosphorus-32, eye, tissue, half life, radioactivity measurement, exponential equation, radiobiological parameter

ABSTRACT: The nature of phosphorus-32 distribution in eye tissues following single dose administration was investigated to determine the radiobiological parameters and to formulate empirical equations describing the accumulation-elimination processes as a function of time. In experiments on 21 rabbits weighing 2.2+0.3 kg, a single P32 dose with a concentration of 250 microcuries/kg was introduced subcutaneously. Animals were killed by air embolism over a period of 1 to 60 days. Radioactivity of eye tissues was measured by a B-2 unit with a MST-17 counter. On the basis of P32 radioactivity

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L 54640-65
ACCESSION NR: AP5010340

findings for the eye tissues, a composite exponential model was
selected for equations describing the accumulation-elimination
processes in the cornea, aqueous chamber, vitreous body, iris and
ciliary body, crystalline lens, the sclera+choroid+retina membrane,
and the eye as a whole. In additional experiments, the calculated
values of P^{32} concentrations in eye tissues were checked with
experimental values. Of all the eye tissues, the iris and ciliary
body tissues displayed the highest radioactivity reaching a maximum
of 0.218 microcurie/g 1 hr after P^{32} administration. About 70% of
this activity is eliminated during the effective half-life period of
1.2 days and the remaining 30% is eliminated after a 9 day period.
With the calculated values for P^{32} concentrations in eye tissues
concurring with the experimental values, the equations based on the
present study data may be used to determine P^{32} concentrations in eye
tissues following single dose administration for periods up to 60
days. Orig. art. has: 2 tables, 1 figure, and 8 formulas.

ASSOCIATION: Institut gigiyeny i profzabolevaniy, Kiev (Institute
of Hygiene and Occupational Diseases)

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L 54640-65
ACCESSION NR: AP5010340   O

SUBMITTED: 25May63   ENCL: 00   SUB CODE: LS

NR REF SOV: 002   OTHER: 000

L 56544-65

ACCESSION NR: AP5010361   UR/0205/65/005/002/0310/0311

AUTHOR: Khvoynitskaya, M. A.; Dobrovol'skiy, L. A.; Likhtarev, I. A.

TITLE: Differences in radiophosphorus effective half-life kinetics in the ovaries with single and multiple administration of the isotope into the organism

SOURCE: Radiobiologiya, v. 5, no. 2, 1965, 310-311

TOPIC TAGS: animal, mouse, phosphorus-32, single dose, fractional dose, ovary, effective half-life

ABSTRACT: The first of two experimental groups of white mice weighing 150 ± 15 g received a single subcutaneous injection of P^{32} (2 microcuries), and the second group received the same dose daily for $1\frac{1}{2}$ yrs to determine P^{32} effective half-life differences in the ovaries. Animals were killed at regular intervals and radiophosphorus concentrations in ovary tissues were measured by direct radiometering. The effective half-life for a single P^{32} dose was found to be 5.5 ± 1 days and on this basis calculations for the daily administered P^{32} dose were made. However, the calculated effective half-life of P^{32} in the ovaries proved to be considerably higher than experimental findings. Whereas the zero moment concentration in the ovary for a single P^{32} dose was 1.5% of initial activity

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L 56544-65
ACCESSION NR: AP5010361

and effective half-life was 5.5/1 days, corresponding values for the chronic
P^{32} dose were 0.77 g% and 3.3 days. No explanations for the significant
differences in P^{32} kinetics in the ovaries are offered. Orig. art. has: 2
figures and 3 formulas.

ASSOCIATION: Kiyevskiy nauchno-issledovatel'skiy institut gigiyeny truda i
profzabolevaniy (Kiev Scientific-Research Institute of Labor Hygiene and
Occupational Diseases)

SUBMITTED: 10Jun63   ENCL: 00   SUB CODE: LS

NR REF SOV: 002   OTHER: 000

Card 2/2

L 27574-66   EWT(m)

ACC NR: AP6018366   SOURCE CODE: UR/0241/65/010/002/0017/0022

$\frac{28}{B}$

AUTHOR: Pugachevskiy, V. P.; Likhtarev, I. A.

ORG: Kiev Scientific Research Institute of Labor Hygiene and Occupational Diseases
(Kiyevskiy nauchno-issledovatel'skiy institut gigiyeny truda i profzabolevaniy)

TITLE: Assessing certain radiotoxicological characteristics of P sup 32

SOURCE: Meditsinskaya radiologiya, v. 10, no. 2, 1965, 17-22

TOPIC TAGS: phosphorous, radioisotope, radiology, toxicology, rat

ABSTRACT: To investigate the chronic penetration of P^{32} into the organism, the authors administered this isotope daily over a period of 100 days to white rats. The administration was peroral, in the form of an aqueous solution of $Na_2HP^{32}O_4$, in doses of 2 microcuries per day. For comparison, in order to determine the possibility of whether experiments with a single administration of P^{32} can be used to determine the amount of the isotope accumulated by tissues in chronic cases, another group of rats was administered the same dose of P^{32} only once. The rats in both groups were killed at different periods from the beginning of the experiments, with the object of assaying their P^{32} content. The specific activity of their blood, heart, liver, lungs, adrenals, kidneys, spleen, evacuated intestine, ovary, uterus, muscle, skin, and bones was separately determined. It was found that

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L 27574-66

ACC NR: AP6018366

averaging the equilibrium concentration of P^{32} for all the 10 vital organs and tissues causes the true concentration to be overestimated by more than 36% for the ovary and underestimated by 32% for the liver. Assuming that P^{32} gets uniformly distributed in the tissues of the 10 organs enumerated above, such an error is low enough for purposes of practical dosimetry. Therefore, experiments with single administration of P^{32} are adequate for approximate calculations of the dose, the absorption, and the equilibrium concentration. Orig. art. has: 7 formulas and 6 tables. /JPRS/

SUB CODE: 06 / SUBM DATE: 25Jan64 / ORIG REF: 008 / OTH REF: 003

Card 2/2

LIKHTARNIKOV, L. M.

"Linear Integral Equations With Two Parameters (Generalized Linear Integral Equations)." Cand Phys-Math Sci, Irkutsk State U, Irkutsk, 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Instiutions (12)
SO: Sum. No. 556, 24 Jun 55

16(1)

AUTHORS: Likhtarnikov, L.M., Myakishev, V.P.   SOV/20-127-3-9/71

TITLE: The Solution of a Certain Class of Partial Integro-Differential
              Equations by the Fourier Method

PERIODICAL: Doklady Akademii nauk SSSR,1959,Vol 127,Nr 3,pp 516-519 (USSR)

ABSTRACT: The authors propose a Fourier method for the solution of the
              equation

$$L[u] = f(x,t) + \lambda \int\int_{(D)} k(x,t;z,\tau)M[u]dzd\tau$$

where $L[u]$ and $M[u]$ are linear differential operators of
second and first order and $L[u]$ is hyperbolic.
I.G. Petrovskiy and M.I. Razovskiy are mentioned in the paper.
There are 2 Soviet refenreces.

ASSOCIATION: Irkutskiy gosudarstvennyy universitet imeni A.A. Zhdanova
             (Irkutsk State University imeni A.A. Zhdanov)

PRESENTED: April 8,1959, by S.L. Sobolev, Academician

SUBMITTED: March 13, 1959

Card 1/1

LIKHTARNIKOV, L.M.

      Linear integral equations with two parameters. Trudy Nauch.ob'ed.
      prep. fiz.-mat. fak.ped.inst.Dal'.Vost. 1:5-14 '62.   (MIRA 17:3)

      1. Khabarovskiy gosudarstvennyy pedagogicheskiy institut.

L-39431-65   EWT(d)   Pg-4   IJP(c)   S/0044/64/000/012/B056/B056   13
ACCESSION NR: AR5006736   B

SOURCE: Ref. zh. Matematika, Abs. 12B313

AUTHOR: Likhtarnikov, L. M.   16

TITLE: The approximation of solutions of integro-differential equations by re-
placing an arbitary kernel with a degenerate one

CITED SOURCE: Tr. Nauchn. ob"yedin. fiz.-matem. fak. vyzov Dal'n. Vost., v. 3,
1963, 23-30

TOPIC TAGS: differential equation, integral equation, kernel, approximation, in-
tegrodifferential equation

TRANSLATION: The linear integro-differential equation

$$\varphi(x) = f(x) + \lambda \int_a^b \sum_{i=0}^{m} K_i(x, s) \varphi^{(i)}(s) \, ds.$$

is solved approximately. Replacing the kernels $K_i(x, s)$ $(i = 0, 1, \ldots, m)$ by
the Bateman functions (RZh Mat, 1963, 4 V 77 k, pp. 170-178), the author obtains
a readily solvable equation with a degenerate kernel. An estimate of the con-

Card 1/2

L 39431-65

ACCESSION NR: AR5006736   0

vergence is given. L. Krivoshein.

SUB CODE: MA   ENCL: 00

Card   2/2

welding & ? laboratory

The Real Safety Factor of Welded Joints. Ya. M. Libk-
tarnikov. (*Avtog. Delo*, 1949, No. 7, 8-10). [In Russian].
The results are given of mechanical tests on 1040 specimens
made from butt-welded plates of steels with the following
respective compositions: Carbon, 0·18 and 0·14%; manganese,
0·44 and 0·40%; silicon, traces; sulphur, 0·025 and 0·016%;
phosphorus, 0·015 and 0·024%. The welding was carried
out automatically and manually with high-quality Russian
and foreign coated electrodes, and tensile and bending tests
were made. The frequency curves for these properties for
specimens welded by the different electrodes are presented,
and the maximum and mean safety factors are calculated by
comparison with standard values.—s. k.

Strength of Seams Resulting From Manual Arc Welding With Deep Penetration. (In Russian.) Ya. M. Likhtarnikov. *Avtogennoe Delo* (Welding), Feb. 1950, p. 18-21.

Physical and mechanical properties of welds in steel obtained with different welding techniques, electrode compositions, thicknesses of base metal are tabulated and charted.

1. LIKHTARNIKOV, Ya. M.; SEKRETOV, A.N.

2. USSR (600)

4. Electric Welding

7. Advanced method of work organization of automatic welding Eng. Ya. M. Likhtarnikov, A.N. Sekretov, Avtog.delo 24 no. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, ___APRIL___ 1953, Uncl.

LIKHTARNIKOV, Ya.M.; KRUPENNIKOV, S.S., inzhener, redaktor; DUGINA, N.A.,
tekhnicheskiy redaktor.

[Manufacturing steel construction elements for traveling cranes]
Iz opyta izgotovleniia stal'nykh konstruktsii kranov-peregruzhatelei.
Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1954. 21 p.
        (Cranes, derricks, etc.)   (MLRA 8:1)

LIKHTARNIKOV, YA. M.

135-10-4/19

AUTHORS: Likhtarnikov, Ya.M., Candidate of Technical Sciences, and
             Bekker, A.G., Engineer

TITLE: Investigation of Weldability and Basic Properties of Steel
             "14ХГС" (Issledovaniye svarivayemosti i osnovnykh svoystv
             stali "14ХГС")

PERIODICAL: Svarochnoye Proizvodstvo, 1957, No 10, pp 13-16 (USSR)

ABSTRACT: The subject investigation on chrome-manganese-silicon steel
             "14ХГС" which is produced by the Voroshilovsk plant, Donbass,
             since 1955-56, was necessary in view of unsatisfactory qualit-
             ies of presently used steel grades "НЛ" (ГОСТ 5058-49) be-
             cause the Sixth 5-Year Plan requires increased output of low-
             alloy steel for machinebuilding and constructions. Steel "НЛ2"
             was statistically investigated (Reference 1) and found non-
             uniform in mechanical properties and chemical composition and
             less machinable than low-carbon steel. Besides, this steel
             contains nickel which is a bottleneck material, and its weld-
             ing is not yet completely mastered. The steel grade "14ХГС"
             was also statistically investigated, and the present article
             gives the results of 884 tests at industrial plants in the
Card 1/3   form of charts and curves. The article includes the compo-

135-10-4/19

Investigation of Weldability and Basic Properties of Steel "14ХГС"

sition of this steel grade, the grades of electrodes and electrode coatings and their mechanical properties. The yield limit, the ultimate strength and the relative elongation of steel "14ХГС" are stated to be within the corresponding property ranges of the low-alloy steel "НЛ-2" but its yield limit is more uniform, hence a higher rated resistance can be recommended for calculations when this steel is used. The cold brittle-ness threshold of steel "14ХГС" is below -40° C. It is readily welded with the use of conventional one-arc automatic machines applying conventional technology and the flux "АН -384 А" and also with the use of low-carbon welding wire with corresponding flux. The electrodes "Э42А" and "Э42" give satisfactory results. The steel grade "14 ХГС"is readily weld-able to steel grade "Ст. 3". In the result of present in-vestigation, steel "14 ХГС" is being employed in production of the piping and other structures for the Severnyy Donets-Don-bass canal. There are 5 charts, 4 diagrams and 2 references (both Russian).

Card 2/3

135-10-4/19

Investigation of Weldability and Basic Properties of Steel "14 ХГС"

ASSOCIATION: Stalino Plant of Metal Structures (Donbass) (Stalinskiy zavod
               metallokonstruktsiy, Donbass)

AVAILABLE: Library of Congress

Card 3/3

LIKHTARNIKOV, Ya.M., kand.tekhn.nauk

Properties of the 14KGS low-alloyd steel in 9 mm. rolled shapes
and possibilities for its use in construction. Mat. postal'.
konstr. no.4:137-152 '59.   (MIRA 13:8)
            (Steel, Structural)

S/137/60/000/010/029/040
A006/A001

Translation from: Referativnyy zhurnal, Metallurgiya, 1960, No. 10, p. 260,
24526

AUTHOR: Likhtarnikov, Ya.M.

TITLE: Study of Strength Characteristics of Low Alloy 14 ХГС (14KhGS)
            Steel

PERIODICAL: Tr. Donetsk. industr. in-ta, 1959, Vol. 34, pp. 19 - 35

TEXT: For the purpose of investigating the properties of 14KhGS steel
and the possibility of using it in constructions, a statistical evaluation was
made of test data from a number of plants on the chemical composition and the
mechanical properties of a great amount of melts of the aforementioned steel
grade. It is suggested to lower for 14KhGS steel the GOST 5058-57 standard
values of σ_b from 50 to 48 kg/mm^2 and of σ_s from 35 to 34 and 32 kg/mm^2 for
$\leqslant$10 and 11 - 20 mm thick rolled stock respectively. It was established that
for 24KhGS steel the coefficient of homogeneity (at a standard value of σ_s
equal to 34 kg/mm^2) was equal to 0.9 which makes it possible to assume a rated

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S/137/60/000/010/029/040
A006/A001

Study of Strength Characteristics of Low Alloy 14 ХГС (14KhGS) Steel

strength of 30 kg/mm^2, whereas for НЛ-2 (NL-2) steel corresponding values of 0.85 and 29 kg/mm^2 were established according to N and TU 121-55. On the basis of results obtained by testing the a_k value and weldability, it was found that $\leqslant$ 20 mm thick 14KhGS steel can be used in welded structures. There are 7 references.

T.F.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

LIKHTARNIKOV, Yakov Moiseyevich, kand.tekhn.nauk,dots.; POLTORATSKAYA,E.,
    red.; ZELENKOVA, Ye., tekhn. red.

[Economics of steel construction] Ekonomika stal'nykh konstruktsii.
Kiev, Gosstroiizdat USSR, 1962. 178 p.   (MIRA 15:7)
  (Building, Iron and steel--Estimates and costs)

LIKHTARNIKOV, Ya.M., kand.tekhn.nauk

Manufacture of steel elements in series. Mont. i spets. rab.
v stroi. 24 no.7:18-21 Jl '62.   (MIRA 15:6)

1. Donetskiy politekhnicheskiy institut.
                    (Steel, Structural)

LIKHTARNIKOV, Ya.M.

Evaluating the economy and efficiency of welding structural
elements. Avtom.svar. 16 no.5:78-83 My '63.   (MIRA 16:11)

1. Donetskiy politekhnichekiy institut.

LIKHTARNIKOV, Ya.M., kand. tekhn. nauk

Investigating basic technical and economic indices for steel
structures and their determination in the designing process.
Mat. po met. konstr. no.9:117-143 '65.   (MIRA 18:11)

LIKHTARNIKOV, Ya.M., kand. tekhn. nauk

Evaluation, during the designing process, of the technical and
economic indices of the assembly of metal elements. Prom.
stroi. 42 no. 6:38-43 '65.   (MIRA 18:12)

1. Donetskiy politekhnicheskiy institut.

GORELIK, S.L., dots (Moskva, 34, ul. Kropotkina, d.24, kv.7); LIKHTEN, M.Ya.

The question of Hashimoto's struma. Nov.khir. arkh. no.3:67-72
My-Je '58.   (MIRA 11:9)

1. Khirurgicheskoye odeleniye Moskovskoy gorodskoy bol'nitsy. No.28
       (GOITER)

GORELIK, S.L., dots.; LIKHTEN, M.Ya.

Pheochromoblastoma of the adrenals. Khirurgiia 35 no.7:103-106
Jl '59.   (MIRA 12:12)

1. Iz khirurgicheskogo otdeleniya bol'nitsy No.28 (glavnyy vrach
M.A. Pastukhova), Moskva.
          (ADRENAL GLANDS--CANCER)

ODINOV, David Emmanuilovich; LIKHTEN, M.Ya., red.

     [Surgery by the outpatient physician] Khirurgiia ambu-
     latornogo vracha. Moskva, Meditsina, 1965. 390 p.
                         (MIRA 18:2)

LIKHTENBAUM, L.L.

SEMENOVSKAYA, E.N.; LIKHTENBAUM, L.L.

Daily function modification of lability and electrical sensitivity
of the visual analysor. Probl. fiziol. opt. no.10:93-96 '52.
(MIRA 7:11)

1. Otdeleniye fiziologicheskoy optiki Gos. nauchn. issl. instituta
glaznykh bolezney im. Gel'mgol'tsa. Zav. otdeleniyem chl.-korr.
AN i AMN SSSR prof. S.V.Kravkov [deceased]
        (EYE, physiology,
            daily periodicity of lability & electrical sensitivity)
        (PERIODICITY,
            daily variations of visual lability & electrical
        sensitivity)

L-13724-63   BDS/EWT(m)   AFFTC/ASD
ACCESSION NR: AP3002716   S/0120/63/000/003/0032/0039

AUTHOR: Likhtenbaum, L. L.; Moiseyev, B. N.; Kaftanov, V. S.   54
                                                                      53

TITLE: Reading channel of the outfit designed for measuring track-photograph
coordinates

SOURCE: Pribory* i tekhnika eksperimenta, no. 3, 1963, 32-39

TOPIC TAGS: nuclear measurement, bubbling chamber, track photograph, reading channel

ABSTRACT: A reading channel is described of an automatic outfit intended for
measuring bubbling-chamber photographs. The diffraction-grating method developed by
J. Guild (The interference systems of crossed diffraction gratings, Oxford, 1956)
is used. Reversible counters that ensure recording of any movement of the measur-
ing stage are employed. Without interference in the counting process, the data can
be taken, from the reading channel, in the form of standard punched cards suitable
for introducing into a computer. The gratings prepared by the State Optical
Institute are 220-mm long and have a pitch of 10 microns and an accumulated error
of 1-2 microns. The construction of the device that includes a photographic head,
two diffraction gratings, a control unit, reversible counter, and a TG3-0, 1/1,
3-thyratron storage is described in detail. Orig. art. has: 10 figures.
Card 1/2   ASSN: Inst. of the Theoretical and Experimental Physics

LIKHTENBAUM, L. M.

Lihtenbaum, L. M. On mappings of discrete Linfield spaces. Mat. Sbornik N.S. 23(65), 315–328 (1948). (Russian)

This is a study of a dimension-theory for "discrete spaces" [B. Z. Linfield, Espace Discret Paramétrique et Non Paramétrique, Paris, 1925]: in such spaces certain pairs of points are designated as neighbors, the relation being reflexive and symmetric. The set of points of such a space G is called the basis of G. A space G^* is a subspace of G if the basis of G^* is a subset of the basis of G and if two points of G^* are neighbors (in G^*) only if there are neighbors in G; G^* is a principal subspace if moreover two points of G^* are neighbors in G^* whenever they are neighbors in G. With each point a of G there is associated one such principal subspace whose basis is the set of neighbors of a, distinct from a. This subspace serves to define the local dimension $\dim_a G$ of G at a. Then the global dimension $\dim G$ is sup $\dim_a G$. The definition of dimension is recursive, completely analogous to the Menger-Urysohn theory, and begins with the null-space which is of dimension -1.

The set function $\dim A$, defined as the dimension of the subspace of G induced by the basis A, is shown to be monotonic and to satisfy the "Summensatz":

$$\dim (A+B) \leq \dim A + \dim B + 1.$$

It is shown that $\dim G \leq n$ if and only if G contains $n+1$ distinct points each neighbor to the others. Two subspaces of G are called mutually complementary if every pair of neighbors of G is a pair of neighbors in one and only one of the subspaces. If these are of respective dimensions m and n, then it is proved that $\dim G \leq 2^{m+n+3} - 1$.

A variety of continuous (single-valued, neighbor-preserving) transformations $f(G) = G^*$ are defined and relations between them exhibited, for example: (1) inner, if each pair of neighbors in G^* comes from at least one neighbor pair in G; (2) outer, if f^{-1} is one-to-one; (3) folded (svyertivayushchi), if b, b' neighbors in G^* implies that every point of $f^{-1}(b)$ is neighbor to some point of $f^{-1}(b')$; (4) dispersed (razvyertivayushchi), if no two points of $f^{-1}(b)$ are neighbors, for every b in G^*. One interesting theorem is the unique factorization of a continuous transformation into an inner and outer one.

The principal objective of the paper is to establish the invariance of dimension under homeomorphism, and to investigate some types of dimension raising and dimension lowering transformations.   L. Zippin (Flushing, N. Y.)

Source: Mathematical Reviews,   Vol   No.

Lichtenbaum, L. M. On certain coverings of the two-dimensional and three-dimensional toruses. Mat. Sbornik N.S. 22(64), 179–190 (1948). (Russian)

Let R be a three-dimensional torus and let $a_1, \cdots, a_n$ be closed subsets of R which in their totality cover R. Let there be defined certain mutually exclusive collections A_j, whose elements are the sets a_i, and let k_j denote the number of these latter sets which belong to A_j, $j=1, 2, \cdots, g$; $k = \sum k_j$. Let A_j^* denote the point-set belonging to A_j. Suppose now that the sets a_i and the sets A_j^* satisfy the following conditions: (γ) the intersection of every pair of the a_i is homeomorphic to a plane simple polygonal surface or is vacuous, the intersection of a triple of these sets is an arc or is vacuous, of four is a point or vacuous, and the intersection of every five is vacuous; (δ) the point set intersection $A_j^* A_{j+1}^*$, $1 \leq j \leq g-1$ is homeomorphic to a two-dimensional torus and the intersections of the sets a_i with these toruses constitute a system with properties analogous to (γ), above. This note proves that a covering of the three-dimensional torus, delimited as in the preceding paragraph, contains some set a_i, which intersects at least twelve other sets of the covering. This theorem is expressed in this form: a covering of the specified kind contains a set which has at least twelve neighbors distinct from itself.

An introductory first section establishes a numerical inequality which relates to some of the counting operations that have to be performed in the proof. The section appears to deal with a kind of finite, discrete, "neighbor"-space, but this space is adequately represented by the system of sets a_i (of the covering) where the undefined concept "is neighbor to" may be interpreted simply as "has nonvacuous intersection with." L. Zippin (Flushing, N.Y.).

Lihtenbaum, L. M. On the topology of surfaces. Uspehi Matem. Nauk (N.S.) 5, no. 1(35), 214-216 (1950). (Russian)

Let R be a two-dimensional polyhedron whose faces are simple polygons, with the property denoted by (α) that each edge of any polygon belongs to precisely two polygons. Suppose the cells of each dimension $\nu=0, 1, 2$, to be enumerated and let $\alpha_{i(\nu)}^{(\nu)}$, $i(\nu)=1, 2, \ldots, \alpha^{(\nu)}$, denote one of them. Let $\alpha_{i(\nu)}^{(\mu\nu)}$ denote the number of μ-cells meeting this them. For this same cell, let $\alpha_{i(\nu)}^{(\mu\nu)}$ denote the number of μ-cells which are incident with a μ-cell which is incident with the given $\alpha_{i(\nu)}^{(\nu)}$ (it is not stated whether a cell is to be counted more than once, or whether the cell $\alpha_{i(\nu)}^{(\nu)}$ itself is to be counted). Now let $\alpha^{(\nu,\mu)}=\sum_{i(\nu)}\alpha_{i(\nu)}^{(\mu\nu)}$. The author asserts a number of identities, among them

$$\alpha^{(\iota,\nu)}=2\alpha^{(\iota)},$$
$$\alpha^{(\alpha,\nu)}-\alpha^{(\iota,\iota)}+\alpha^{(\varepsilon,\nu)}=0,$$

from which there may be derived the following theorems [there is no indication of proof]. (1) In order that a given representation of R by simple polygons satisfy property (α) above, it is necessary and sufficient that the number of polygons containing a common edge be a constant and that $\alpha^{(\iota,\nu)}=2\alpha^{(\iota)}$ ($\nu\neq\mu$). (2) The polygonal decomposition satisfying (α) will be a triangulation if and only if $\sum[\alpha_{i(2)}^{(2,0)}]^{2}=6\alpha^{(1)}$. (3) If R is a closed surface and N is its Euler characteristic, then $N=\sum(\alpha_{i}^{(2,1)}-1)^{2}+\sum(\alpha_{i}^{(1,1)}-1)^{2}-\alpha^{(1,1)}$. (4) If, moreover, the decomposition is a triangulation: $3N=3\alpha^{(0)}-\alpha^{(0,0)}$. (5) If $\alpha^{(0)}>12$, then $\alpha^{(0,0)}>5\alpha^{(0)}$ and if in addition $N\leq0$, then $\alpha^{(1,1)}\geq6\alpha^{(0)}$. (6) Suppose that R is covered by a finite number, exceeding 12, of sets which are the closures of simply connected mutually exclusive domains, and suppose that the intersection of every two closures is vacuous or is connected. Then the arithmetic mean of the number of the closed sets which have a point in common with some one of these sets is greater than 5.

The author indicates extensions of (6) in which the condition of simple-connectedness may be dropped when the sets are of small enough diameter in the polyhedron. There is a reference to work of A. D. Alexandrov [Rec. Math. [Mat. Sbornik] (N.S.) 2(44), 307-318 (1937)] containing the "theorem of six neighbors" from which some of the results of this paper may be obtained.

L. Zippin.

LIKHTENBAUM, L. M.

Call Nr: AF 1108825

Transactions of the Third All-union Mathematical Congress (Cont.) Moscow,
Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp.
There are 11 references, all of them USSR.

Likhtenbaum, L. M. (Moscow). Characteristic Numbers of
Improper Graph.   135-136

Smirnov, Yu. M. (Moscow). On the Extension of
Topological Spaces.   136

Smirnov, Yu. M. (Moscow). On Metrisation of Local
Compact Spaces Which are Decomposable into the Sum of
Countable Number of Sets With Countable Bases.   136-137

Mention is made of Aleksandrov, P. S. and Uryson, P. S.

Fet, A. I. (Novosibirsk). Calculus of Variations in the
Large.   137

Mention is made of Lyusternik, L. A., Shnirel'man, Shvarts,
A. S., Al'ber, S. I. and Pontryagin, L. S.
Card 44/80

*

AUTHOR: Likhtenbaum, L.M.   SOV/42-13-5-6/15

TITLE: Duality Theorem for Nonsingular Graphs (Teorema dvoystvennosti
              dlya neosobennykh grafov)

PERIODICAL: Uspekhi matematicheskikh nauk, 1958, Vol 13, Nr 5, pp 185-190 (USSR)

ABSTRACT: To nonsingular graphs K there are adjoint certain matrices. By
              considering the closing homomorphisms of a polygon in K the
              author obtains some dual relations between the elements of the
              graphs and between the properties of matrices.

SUBMITTED: November 4, 1956

Card 1/1

16(1)   05260
AUTHOR: Likhtenbaum,L.M.   SOV/140-59-5-16/25

TITLE: The Traces of Powers of Neighborhood Matrices of the Corners and
             Edges of a Non-Singular Graph

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, 1959,
             Nr 5, pp 154-163 (USSR)

ABSTRACT: In a somewhat changed and improved form the author gives in
             essential the same results which he has already published in
             ⎾Ref 1⏌.
             There are 3 references, 2 of which are Soviet, and 1 Swedish.

ASSOCIATION: Moskovskiy vecherniy metallurgicheskiy institut (Moscow
             Metallurgical Evening Institute)

SUBMITTED: January 9, 1958

Card 1/1

LIKHTENBAUM, L.M.

New theorems on graphs. Sib. mat. zhur. 3 no.4:561-568 Jl-Ag '62.
(MIRA 15:7)

(Graphic methods)

LIKHTENBERG, Yaroslav, professor

Experimental and clinical study of wound and postoperative
shock.[with summary in English, p. 152-153] Khirurgiia,
33 no.1:87-91 Ja '57   (MLRA 10:4)

1. Iz khirurgicheskoy kliniki voyenno-meditsinskoy akademii
imeni Yana E. Purkin'ye (Chekhoslovakiya)
         (SHOCK
              postop. & traum., clin. & exper. aspects) (Rus)
         (WOUNDS AND INJURIES, compl.
              shock, clin. & exper. aspects) (Rus)
         (SURGERY, OPERATIVE, compl.
              postop. shock, clin. & exper. aspects) (Rus)

LIKHTENBERG, Yu.M.

Ethnographic description of the collection of F.P.Litke. Sbor.
Muz.ant.i etn. no.16:322-257 '55.   (MIRA 8:11)
         (Caroline Islands--Handicraft)

S/080/60/033/009/002/021
A003/A001

AUTHORS: Domon', A., Likhtenberger, E.

TITLE: Some Results of the Investigation Into the Structural Transformation and the Properties of the Oxide Film on the Surface of Aluminum

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol. 33, No. 9, pp. 1940-1951

TEXT: The behavior of oxide films contacting and not directly contacting with aluminum was studied on the transformation of a film of bayerite on the metal surface into bemite in an aqueous medium. In the experiments 99.5% pure Al with a 94% content of active metal and a grinding degree of 100 according to DIN, and a powder of hydrargillite with a grinding degree of 100 according to DIN were used. It was shown that the structural transformations of the various oxide films formed on the surface of aluminum depend not only on the conditions of the outer medium (especially on the temperature), but also on the aluminum ions diffusing from the metal. The effect of the aluminum ions is explained by the structural transformation of the protective layer formed on the surface of aluminum in an aqueous medium at a temperature below 100°C, and under high

Card 1/2

S/080/60/033/009/002/021
A003/A001

Some Results on the Investigation Into the Structural Transformation and the
Properties of the Oxide Film on the Surface of Aluminum

pressure in the case of high temperature it differs from the behavior of oxy-
hydrates not contacting with the metal. The same fact is observed in the struc-
tural transformation of an amorphous oxide film obtained by anode oxidation. The
presence of aluminum ions diffusing from the metal causes the formation of thermo
dynamically less stable oxyhydrates on the surface of aluminum metal. There are
17 figures, 8 tables and 20 non-Soviet references.

ASSOCIATION: Issledovatel'skiy institut tsvetnykh metallov (Research Institute
               of Non-Ferrous Metals), Budapest

SUBMITTED: February 9, 1960

Card 2/2

24007

S/080/61/034/006/009/020

D247/D305

AUTHOR: Likhtenberger, E.

TITLE: Study of mechanism of anodic oxidation of aluminum
             and of the oxide structure

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 6, 1961,
             1286 - 1291

TEXT: The process of oxide film growth on Al is seen as a result
of the migration in opposite directions of Al^{3+} and O^{-2} ions
through a barrier layer adjacent to the metal surface. Continuous
corrosion of the external part of the barrier layer by the electro-
lyte and the renewal of the layer by continuous migration of diffu-
sing ions forms a porous oxide layer above the barrier. This mecha-
nism, however, fails to account for the initial formation of the
barrier layer. The object of this paper is to examine this point.
Specimens were used of 99.99 % and 99.5 % purity Al and alloys
containing 3 % Mg, 3 % Zn and 0.2 % Ti. Oxidation was effected in

Card 1/3

Study of mechanism of ...

one of three electrolytes: (1) 1 % H_2SO_4, (2) 2.5 % H_2SO_4, (3) 1 % H_2SO_4 1 % H_3BO_3. The temperature range was -1 to + 15°C. Operating voltage varied from 20 to 80 volts. Hard, wear-resistant coatings were obtained by anodizing in 1 % H_2SO_4 at a voltage of 50 volts with temperature between -1 and + 1°C. This produced a layer of 200μ thickness with H_v = 450-500 units of hardness. Study of the structure of the metal surface beneath the oxide film showed that oxide formation commences with formation of nuclei on the grain boundaries. The oxide nuclei grow radially, and continue until the growing islets join up with each other. The total oxide thickness and the barrier layer thickness and the operating voltage all in- crease to maxima and then decrease. The structure of the hard oxide layer consists of a barrier and a porous oxide layer. The effect is shown of operating voltage, temperature, electrolyte composition and of metal on barrier layer thickness which is maximum at 40-50 volts and on high purity Al (300-400 Å) compared with 150 Å on com- mercial Al. The barrier layer forms at the inception of oxidation and its thickness during anodization remains practically constant.

Card 2/3

LIKHTENFEL'D, L.M.

USSR/Miscellaneous - Communications

Card   1/1:   Pub. 133 - 9/20

Authors   : Likhtenfel'd, L. M.

Title   : Increase in tempo of rural radiofication

Periodical   : Vest. svyazi 7, page 17, July 1954

Abstract   : Resolution calling for increased tempo in rural radiofication work with
                 1957 fixed as the year when radiofication of the Kabardinsk ASSR should
                 be completed.

Institution   : ...

Submitted   : ...

AUTHOR: _Likhtenfel'd, L.M., Director   SOV/111-58-2-16/27

TITLE: Our Experience in the Development of Rayon Communication
              Lines (Nash opyt razvitiya vnutrirayonnoy svyazi)

PERIODICAL: Vestnik svyazi, 1958, Nr 2, p 20   (USSR)

ABSTRACT: The villages and collective farms of the Chuvash ASSR will
              be equipped with "UPTS" semi-automatic telephone apparatus.
              The "UPTS" system proved most economical for the local re-
              quirements. There is 1 sketch.

ASSOCIATION: Chuvashskaya direktsiya radiotranslyatsionnoy seti(The
              Chuvash Directorate of the Rebroadcasting Network)

Card 1/1

LIKHTENOV, B. M.

     "Selection of the Calculated Air Velocity Magnitude in the Axial
Compressors of Transportation Engines and Gas Turbines, " Izvest. Akad. Nauk
SSSR, Otdel. Tekh. Nauk 1955, 38-46

KEDROV, Yu.; KOROTKOV., M.; IKHIT ISHT YI, M.

To make it interesting for students. Prof.-tekh. obr. 21 no.2:
27 F '64. (MIRA 17:9)

1. Professional'no-tekhnicheskoye uchilishshe No.9, Moskva.

LIKHTENSHTEYN, A.O., kand.med.nauk

Lung resection in the district hospital. Kaz.med.zhur. 40
no.5:19-21 S-O '59.   (MIRA 13:7)

1. Iz khirurgicheskogo otdeleniya Urussinskoy rayonnoy bol'-
nitsy Tatarskoy ASSR (glavvrach - N.A. Miftakhov) i Oktyabr'-
skogo gorodskogo protivotuberkuleznogo dispansera (glavvrach -
K.K. Kadyrov) Bashkirskoy ASSR.
                        (LUNGS--SURGERY)

LIKHTENSHTEYN, A.O. (Kazan', ul. Gogolya, d.22)

Lung resection performed in a district hospital.   Grud. khir.
1 no.5:52-54 S-O '61.   (MIRA 15:3)

1. Iz Urussinskoy rayonnoy bol'nitsy Tatarskoy ASSR i
Oktyabr'skogo protivotuberkuleznogo dispansera Bashkirskoy
ASSR.
                  (LUNGS--SURGERY)

VOLKOV, V.Ye.; LIKHTENSHTEYN, A.O.

Some causes of the ineffectiveness and complications in intra-arterial
blood transfusion. Sov. med. 27 no.11:8-11 N '64.   (MIRA 18:7)

1. Kafedra khirurgii i neotlozhnoy khirurgii (zav. - prof. P.V.Krav-
chenko) Kazanskogo instituta usovershenstvovaniya vrachey imeni V.I.
Lenina i otdeleniye grudnoy khirurgii (zav. - kand. med. nauk A.O.
Likhtenshteyn) Kazanskoy dorozhnoy klinicheskoy bol'nitsy.

LIKHTENSHTEYN, A.O., kand.med.nauk

Surgery for diverticula of the esophagus. Kaz. med. zhur. no.6:
55-56 N-D '61.   (MIRA 15:2)

1. Khirurgicheskoye otdeleniye Urussinskoy bol'nitsy Tatarskoy
ASSR (glavnyy vrach - N.A.Miftakhov).
                    (ESOPHAGUS DIVERTICULA)

LIKHTENSHTEYN, A.O., kand.med.nauk; AGAFONOV, A.A.

Hashimoto type thyroiditis. Kaz.med.zhur. no.5:55-56 S-O '62.
(MIRA 16:4)
1. Klinika khirurgii i neotlozhnoy khirurgii (zav. - prof.
P.V.Kravchenko) Kazanskogo gosudarstvennogo instituta dlya
usovershenstvovaniya vrachey imeni V.I.Lenina.
(THYROID GLAND--DISEASES)

TAKHAVIYEVA, D.G., kand. med. nauk; LIKHTENSHTEYN, A.O., kand. med. nauk

  Treatment of acute arterial thromboembolism. Khirurgiia 39
  no.9:78-80 S'63   (MIRA 17:3)

  1. Iz Kazanskogo nauchno-issledovatel'skogo instituta travmato-
  logii i ortopedii (dir. - kand. med. nauk U.Ya. Bogdanovich.

LIKHTENSHTEYN, A. Ye. kandidat neditsinskikh nauk

Defects in the embryonic development as a cause of acute patho-
logy of the peritoneal cavity. Khirurgiia, Moskva no.5:87-89
My '55.   (MLRA 8:9)

1. Iz kliniki neotloshnoy khirurgii 5-y gorodskoy klinicheskoy
bol'nitsy Kazani (dir.dotsent V.M. Osipovskiy)
         (ABDOMEN, ACUTE, etiol.
             abnorm. of abdom.organs)
         (ABNORMALITIES
             abdom.organs as cause of acute abdomen)

LIKHTENSHTEYN, A.Ye.

Case of single-stage esophagoplasty from large intestine. Khirurgiia
35 no.8:110-111 Ag '59.
        (ESOPHAGUS—SURGERY)   (MIRA 13:12)
                  (COLON (ANATOMY)—SURGERY)

LIKHTENSHTEYN, A.Ye., kand.med.nauk

Repeated surgery of the stomach. Vest.khir.   86 no.2:96 '61.

(MIRA 14:2)

1. Iz khirurgicheskogo otdeleniya (zav. - A.Ye. Likhtenshteyn)
Urussinskoy rayonnoy bol'nitsy (gl. vrach - N.A. Miftakhov)
Tatarskoy ASSR.

(STOMACH--SURGERY)

L 10451-67   EWT(m)/EWP(k)/EWP(t)/ETI   IJP(c)   JD/HW

SOURCE CODE: UR/0133/66/000/004/0348/0349

ACC NR: AP6022508

AUTHORS: Kaufman, M. Sh.; Shaykevich, S. A.; Kolmogorov, V. L.; Gleyberg, A. Z.; Aleshin, V. A.; Moiseyev, O. P.; Vostrikov, O. A.; Likhtenshteyn, D. Ye.; Gasilov, V. V.; Kuznetsov, B. N.; Borisov, L. M.

ORG: none

TITLE: Manufacture of two-layer pipes with continuous longitudinal channels between layers

SOURCE: Stal', no. 4, 1966, 348-349

TOPIC TAGS: pipe, steel, metal tube, metal forming

ABSTRACT: A method for manufacturing double layer steel Kh18N10T pipes with continuous longitudinal channels between the layers was developed. Two methods for the production of channels on the outer surface of the inner pipe were investigated--a rolling method and a cutting method. A schematic of the experimental installation is presented (see Fig. 1). It was found that both methods yielded pipes with smooth surfaces and uniform inner channels between the layers. The overall rate of pipe production, employing the cutting or drawing method, was 200 meters/hour. Double layer pipes having a diameter from 17 to 45 mm have been produced industrially. The following people took part in the experimental work: P. S. Ryzhikov, K. A. Fedotovskiy, A. P. Michkov, Ye. I. Tikhonov, and Ya. Z. Grinberg.

UDC: 669.774.35

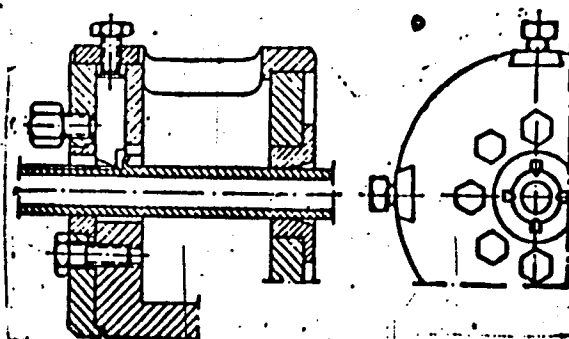Card 1/2

L 10451-67

ACC NR: AP6022508

Fig. 1. Yoke for drawing longitudinal
channels on the outer surface of pipes.

Orig. art. has: 3 graphs.

SUB CODE: 11/ SUBM DATE: none

Bimetals

Card 2/2 bmp

TOKARENKO, I.I.; LIKHTENSHTEYN, E.M.

Methodology of recording motor conditioned and unconditioned
reflexes and their quantitative measurement. Zhur. vys. nerv.
deiat. 15 no.3:573-577 My-Je '65.

(MIRA 18:6)

1. Kafedra normal'noy fiziologii Donetskogo meditsinskogo insti-
tuta im. A.M. Gor'kogo.

SHCHERBINA, V.V.; SHPIS, K.V., NESMEYANOV, A.N., akademik, glav. red.;
TOPCHIYEV, A.B., akademik, zam..glav, red.; ISAKOVA,.O.B., otvetstvennyy
red.; LIKHTENSHTEYN, E.S., otvetstvennyy red.; SHUMKOV, V.I.,
otvetstvennyy red.; MEL'NIKOVA, N.B., red. izd-va; POLESITSKAYA, S.M.,
tekhn. red.

Dmitrii Ivanovich Shcherbakov. Vstup. stat'ia V.V. Shcherbiny. Bib-
liogr. sost. K.V. Shpis . Moskva, 1958. 56 p. (Materialy k biobiblio-
grafii uchenykh SSSR. Seriia geologicheskikh nauk, no.13). (MIRA 11:7)

1. Akademiya nauk SSSR.
                (Shcherbakov, Dmitrii Ivanovich, 1893-)

ZAVORUYEVA, R. S., LIKHTENSHTEYN, G. A.

Polishing felt equipment with fibers running perpendicularly to the glass surface. Stek. i ker. 17 no.8:37 Ag '60.

(MIRA 13:8)

(Glass)   (Grinding and polishing)

TOTESH, A.S.; LIKHTENSHTEYN, G.A.

Improving the design of the polishing disk for the 4PS machine.
Trudy LTI no.49:52-54 '58.   (MIRA 15:5)
                                    (Polishing wheels)

LIKHTENSHTEYN, G. I.

97

INVESTIGATIONS OF THE EFFECT OF A SOLVENT ON THE ISOTOPIC EXCHANGE REACTION RATE FOR C_2H_5I + I^- AT 2500 KG/CM² PRESSURE. M. G. Gonikberg, Y. B. Miller, M. B. Neiman, F. S. D'yachkovskii, G. I. Likhtenshtein, and A. A. Opalunov (Moscow Inst. of Chemical Physics). Zhur. Fiz. Khim. 30, 734-8(1956) June. (In Russian)

Results of investigation revealed that with the increase of the atmosphere pressure up to 2500 kg/cm² the constant for the C_2H_5I + I^- isotopic exchange reaction rate, in alcohol and alcohol-aqueous solutions, more than doubled. In acetone solutions the rate of this reaction under the same pressure was three times slower. Results of kinetic experiments were correlated with measurements of compression for KI solution in alcohol and acetone. (R.V.J.)

S/079/60/030/05/14/074
B005/B126

5.3200

AUTHORS: Nikitin, V. I., Likhtenshteyn, G. I.

TITLE: Tertiary Tetravalent Alcohols of the Acetylene Series and
             Their Conversions. XX. The Structure of the Dehydration
             Products of 1,2,5-Triols of the Ethylene Series

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 5, pp. 1461-1471

TEXT: Together with I. M. Timofeyeva in an earlier paper, one of the
authors showed that 1,2,5-triols of the ethylene series split off a
molecule of water from two hydroxyl groups under the action of diluted
sulfuric acid. Ring closure of the remaining molecules then occurs over
one of the oxygen atoms left behind, forming an unsaturated heterocyclic
alcohol (Ref. 1). This paper gives the clear proof of the structure of
these heterocyclic products. From ketones, labeled with O^{18}, the authors
synthesized the relevant triols of the acetylene series by a method
proposed by one of the authors in Refs. 3 and 4. By hydrating these triols,
1,2,5-triols of the ethylene series were obtained, which were labeled in
position 2 or 5 on the oxygen of the hydroxyl group. Potassium sulfate

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Tertiary Tetravalent Alcohols of the Acetylene   S/079/60/030/05/14/074
Series and Their Conversions. XX. The Structure   B005/B126
of the Dehydration Products of 1,2,5-Triols of
the Ethylene Series

was used to dehydrate these triols. Thus the molecule loses first one
molecule of water and then a second. The separated water was isolated and
its isotope composition was analyzed. Thus, it was possible to determine
the structure of the hydration products clearly. Sulfuric acid could not
be used for the dehydration because in this case the separated water can-
not be isolated. The results obtained by the authors are given in Table 1.
Five different triols were examined. The conditions for the dehydration
reaction and the yield are given for each triol. It appeared that the
dehydration with potassium bisulfate takes place in the same way as the
dehydration with sulfuric acid. However, on dehydration with potassium
bisulfate another second molecule of water is split off, causing the
formation of another secondary, lower boiling fraction as well as the
primary, high boiling dehydration product. Both fractions are easily
separated by vacuum distillation. From the isotope composition of the
water that is split off on the further dehydration of the high boiling
fraction, the position of the hydroxyl group remaining after the first
separation of water can be determined. According to a given scheme the

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Tertiary Tetravalent Alcohols of the Acetylene   S/079/60/030/05/14/074
Series and Their Conversions. XX. The Struc-   B005/B126
ture of the Dehydration Products of 1,2,5-Triols
of the Ethylene Series

out by one of the authors. A Favorskiy piston was used for the
dehydration. There are 1 figure, 2 tables, and 5 Soviet references.

ASSOCIATION: Institut khimii Akademii nauk Tadzhikskoy SSR (Institute
             of Chemistry of the Academy of Sciences of the
             Tadzhikskaya SSR)

SUBMITTED: January 19, 1959

Card 4/4

5.3200
5.4700

AUTHORS: Likhtenshteyn, G. I., Buchachenko, A. L., Vedeneyev, V. I.

TITLE: A Semiempirical Method of Calculating the Formation Heats
            of Hydroperoxides and the Conjugation Energies of Some
            Peroxide Radicals

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 5,
            pp. 1102-1104

TEXT: For the calculation of the energetics of reactions in which
hydroperoxides take part, it is necessary to know the formation heats
of the latter. The scarce experimental data on ΔH of hydroperoxides do
not permit the use of the well-known semiempirical calculation methods
(Refs. 1,2) when calculating the formation heats of organic hydro-
peroxides. The method suggested here is based on the following
considerations: following the ideas developed by N. N. Semenov
(Refs. 3,4), the magnitude of the bond energy X - Y (Q_{XY}) can be
represented as follows: $Q_{XY} = E_{XY} - B_X - B_Y$, where E_{XY} is the splitting

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83135

A Semiempirical Method of Calculating the   S/020/60/133/005/013/019
Formation Heats of Hydroperoxides and the   B016/B060
Conjugation Energies of Some Peroxide Radicals

energy of the X - Y bond. In this connection, the electron configurations
of the free X and Y are assumed to remain equal to those in the initial
molecule. B_X and B_Y are the conjugation energies of the radicals X and Y.

Consequently, the authors write down equations (1), (2), and (3) for
compounds of the types XOOX and XOO·. It follows from the law of energy
conservation that the identity $A_1 + A_2 = A_1^O + A_2^O =$ const (4) is preserved
regardless of the nature of X, with $A_1^O + A_2^O$ being the sum of two three-
electron bonds in the oxygen molecule. In fact, the transition from the
state XOOX to the state $2X + O_2$ can be realized in two ways: a) by the
simultaneous splitting of both OX bonds under energy consumption (5), or
b) by the successive cleavage of X from XOOX and from XO_2 (6). The
combination of equations (1), (2), (5), and (6) yields equation (4) which
may be regarded as a thermodynamic criterion for the fact that all of
the compounds discussed here correspond to the chemical formulas ascribed
to them, that they are tuned thermodynamically, and that they obey the
rule of additivity. The numerical calculation of A_1 and A_2 on the basis

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A Semiempirical Method of Calculating the
Formation Heats of Hydroperoxides and the
Conjugation Energies of Some Peroxide Radicals

S/020/60/133/005/013/019
B016/B060

of equations (1), (2), and (3) was carried out for cases in which X = H, Cl, ClO, R, F, with R being a hydrocarbon radical. The data used for the calculations are shown in Table 1. It follows from Fig. 1 that the value $A_1 + A_2 = A_1^O + A_2^O = 82 \pm 2$ kcal (4') and is independent of the nature of X. Equation (4') allows the calculation of the formation heats of hydroperoxides (Equations (7), (8), and (9)). Fig. 2 shows that the points corresponding to the experimental results (Refs. 5,6) lie well on the straight line calculated on the basis of equation (9). The constancy of the values $A_1 + A_2$ for different compounds and the applicability of relation (9) for hydroperoxides of different classes allow a fairly reliable calculation of the formation heats of such hydroperoxides for which no experimental data are available, by means of a comparison with the known formation heats of corresponding alcohols. This again permits the splitting energies of the O—O bonds to be calculated. Fig. 1 shows that the conjugation energy of the peroxide radicals drops with decreasing electronegativity of the atom which is directly added to oxygen. Other possibilities of applying equation (4') are finally

Card 3/4

LIKHTENSHTEYN, G. I.

Possible interpretation of the compensation effect in some processes.
Kin.i kat. 4 no.1:35-38 Ja-F '63.   (MIRA 16:3)

1. Institut khimicheskoy fiziki AN SSSR.   (Catalysis)
   (Chemical reaction, Rate of)

ACCESSION NR: AP3003792
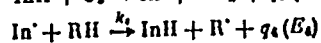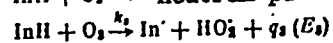
8/0190/63/005/007/1016/1024

AUTHOR: Likhtenshteyn, G. I.; Urman, Ya. G.

TITLE: The theory of oxidation process inhibition

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 5, no. 7, 1963, 1016-1024

TOPIC TAGS: oxidation process, inhibitor, diphenylamine, inhibitor radical, oxygen pressure

ABSTRACT: The effect of the reactions

$$InH + O_2 \xrightarrow{k_1} \text{neutral product}$$
$$InH + O_2 \xrightarrow{k_2} In^{\cdot} + HO_2^{\cdot} + q_3 (E_3)$$
$$In^{\cdot} + RH \xrightarrow{k_3} InH + R^{\cdot} + q_4 (E_4)$$

on the kinetics of oxidation inhibition has been studied theoretically. A system of nonlinear differential equations is written describing the oxidation process in the presence of an inhibitor. From the analysis of these equations it can be shown that a decrease in the slope of induction oxidation period as related to inhibitor concentration curves occurs as the temperature increases in proportion to the

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ACCESSION NR: AP3003792

oxygen pressure. A good agreement is obtained between these predictions and experimental measurements using atactic polypropylene precipitate (from ether and benzene solutions of methyl alcohol) oxidation in the presence of dephenylamine with the addition of polyphenylene. Further calculations show that the synergistic effect of inhibitors is due to elimination of the initiating action of inhibitor radicals formed by the inhibitor oxidation. "The authors are grateful to M. B. Neyman for his advice and interest." Orig. art. has: 19 formulas, 5 figures, and 2 tables.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics, AN SSSR)

SUBMITTED: 23Dec61

DATE ACQ: 08Aug63

ENCL: 00

SUB CODE: GC

NO REF SOV: 016

OTHER: 010

Card 2/2

NEYMAN, M.B.; LIKHTENSHTEYN, G.I.; KONSTANTINOV, Iu.S.; KARPETS, N.P.;
URMAN, Ya.G.

Thermal oxidative degradation of polypropylene studied by the
method of nuclear magnetic resonance. Vysokom.soed. 5 no.11:
1706-1710 N '63.   (MIRA 17:1)

1. Institut khimicheskoy fiziki AN SSSR.

L 17709-63   EPR/EWP(j)/EPF(c)/EWT(m)/BDS   ASD   Ps-4/Pc-4/Pr-4
RM/WW/JFW

ACCESSION NR: AP3004061   S/0076/63/037/007/1515/1520

AUTHOR: Likhtenshteyn, G. I.

TITLE: Kinetic regularities of inhibited oxidation

SOURCE: Zhurnal fizicheskoy khimii, v. 37, no. 7, 1963, 1515-1520

TOPIC TAGS: kinetics, inhibited oxidation, diphenylamine,
            butylphenol, naphtol, capric acid

ABSTRACT: The temperature effect of the hydrocarbon media, oxygen
pressure, and the initial concentration of the antioxidant upon
the inhibiting capacity of diphenylamine, tert-butylphenol and
α-naphtol has been investigated. The kinetics of diphenylamine
consumption in various hydrocarbons and in capric acid were
studied. The findings were compared with the theoretical data
derived from the inhibitor oxidation reaction, from the initiation
of inhibitor radical with hydrocarbons resulting from the reaction,
as well as from the decomposition of peroxide compounds which are
formed during the inhibitor chain termination reaction.   A

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L 17709-63

ACCESSION NR: AP3004061   2

conclusion was made on the basis of the kinetic data to the
effect that, in the studied systems, the decomposition reaction
of the branching agent is formed during termination of the inhibitor
chain. Also, the reaction of inhibitor consumption, which proceeds
at a faster rate than the initiation reaction rate, has an im-
portant function in these kinetics. Inhibitor consumption
accelerates with a weakening of the R=H bonds in the hydrocarbon,
and, in the case of diphenylamine, it is only slightly dependent
on oxygen pressure. "The author is grateful to Prof. M. B.
Neyman for his interest in this work and valuable suggestions."
Crig. art. has: 1 table, 3 figures and 14 formulas.

ASSOCIATION: Akademiya nauk SSSR, Institut khimicheskoy fiziki
(Academy of sciences SSSR, Institute of chemical physics)

SUBMITTED: 12Jul62   DATE ACQ: 15Aug63   ENCL: 00

SUB CODE: CH, PH   NO REF SOV: 008   OTHER: 003

Card 2/2

L 17716-63   EWP(j)/EPF(c)/EWT(m)/BDS   AFFTC/ASD   Pc-4/Pr-4   RM/WW

ACCESSION NR: AP3004069 ·   S/0076/63/037/007/1594/1597

AUTHORS: Likhtenshteyn, G. I.; Sokolina, Ye. A.

TITLE: Critical effects during the oxidation of hydrocarbons in the presence of some antioxidants.

SOURCE: Zhurnal fizicheskoy khimii, v. 37, no. 7, 1963, 1594-1597

TOPIC TAGS: diphenylamine, butylphenol, naphtol, cetane, polypropylene, methyldodecene, rubber

ABSTRACT: The critical concentrations of diphenylamine, tert. butylphenol and Alpha-naphtol in cetane polypropylene, 4-methyldodecene-2 and rubber in a temperature interval of 130 to 170C has been determined. It was established that the critical concentrations found experimentally are two to three times smaller, however, the temperature coefficients are considerably greater than the ones calculated theoretically which assumes the participation of inhibitor only in the chain termination reactions. A supposition is made that the general plan of the inhibitor oxidation cannot be applied with small concentrations of antioxidant. The critical effects need a further theoretical and practical study. "The authors express their gratitude to Prof. M. B. Neyman for his advice and help in this work." Orig. art. has: 1 table, 2 figures and 10 formulas.
Card 1/2

L 17716-63

ACCESSION NR: AP3004069

ASSOCIATION: Akademiya nauk SSSR, Institut khimicheskoy fiziki (Academy of sciences SSSR, Institute of chemical physics) ,

SUBMITTED: 20Jul62   DATE ACQ: 15Aug63   ENCL: 00

SUB CODE: CH   NO REF SOV: 007   OTHER: 001

Card 2/2

LIKHTENSHTEYN, G.I.; SUKHORUKOV, B.I.

Kinetics of cooperative processes. Zhur. fiz. khim. 38 no.3:
747-751 Mr '64.   (MIRA 17:7)

1. Institut khimicheskoy fiziki AN SSSR i Institut khimii
AN Tadzhikskoy SSR.

LICHTENSHTEYN, G.I.; SIVERGIN, Yu.M.; BERLIN, A.A.

       Application of the adiabatic method for the determination of
       kinetic and thermodynamic parameters of processes. Teoret.
       i eksper. khim. 1 no. 5:690-694 S-O '65   (MIRA 19:1)

       1. Institut khimicheskoy fiziki AN SSSR, Moskva. Submitted
       March 8, 1965.